Pratyay19

1 Codeforces Round 1082 (Div 2) Problem B

- Submissions 3 and 4 change drastically in 2 minutes

```cpp
#include <bits/stdc++.h>
using namespace std;

void solve(){
    int n;
    string x;
    cin>>n>>x;

    int l=0,r=n-1;

    for(int i=0;i<n;i++){
        char left = (l%2==0?'a':'b');
        char right = (r%2==0?'a':'b');

        bool canL = (x[i]=='?' || x[i]==left);
        bool canR = (x[i]=='?' || x[i]==right);

        if(canL){
            l++;
        }
        else if(canR){
            r--;
        }
        else{
            cout<<"NO\n";
            return;
        }
    }

    cout<<"YES\n";
}

int main(){
    ios::sync_with_stdio(false);
    cin.tie(NULL);

    int t;
    cin>>t;
    while(t--) solve();
}
```

```cpp
using namespace std;

void solve(){
    int n;
    string s;
    cin>>n>>s;

    int mn=0,mx=0;

    for(int i=0;i<n;i++){
        int nmn=1e9,nmx=-1e9;

        auto ok=[&](int idx,char c){
            char t=(idx%2==0?'a':'b');
            return (c=='?'||c==t);
        };

        for(int l=mn;l<=mn+1&&l<=mx;l++){
            if(ok(l,s[i])){
                nmn=min(nmn,l+1);
                nmx=max(nmx,l+1);
            }
            int r=n-1-i+l;
            if(ok(r,s[i])){
                nmn=min(nmn,l);
                nmx=max(nmx,l);
            }
        }

        for(int l=mx;l>=mx-1&&l>=mn;l--){
            if(ok(l,s[i])){
                nmn=min(nmn,l+1);
                nmx=max(nmx,l+1);
            }
            int r=n-1-i+l;
            if(ok(r,s[i])){
                nmn=min(nmn,l);
                nmx=max(nmx,l);
            }
        }
```

2 Codeforces Round 1080 (Div 3) Problem D

- Drastic differences in submissions 2 and 3 within 7 minutes.

By Pratyay19, contest: Codeforces Round 1080 (Div. 3), pro

```cpp
#include<bits/stdc++.h>
using namespace std;

int main(){

    ios::sync_with_stdio(false);
    cin.tie(NULL);

    int t;cin>>t;

    while(t--){
        int n;cin>>n;

        vector<long long>f(n+2);
        for(int i=1;i<=n;i++)cin>>f[i];

        vector<long long>a(n+1);

        a[1]=f[2]-f[1];

        for(int i=2;i<=n-1;i++)
            a[i]=(f[i-1]-2*f[i]+f[i+1])/2;

        a[n]=f[n-1]-f[n];

        for(int i=1;i<=n;i++)
            cout<<a[i]<<" ";
        cout<<"\n";
    }

    return 0;
}
```

```cpp
#include<iostream>
#include<vector>
using namespace std;

void run(){
    int m;cin>>m;
    vector<long long>g(m+1);
    for(int i=1;i<=m;++i)cin>>g[i];

    if(m==2){
        cout<<g[2]<<" "<<g[1]<<endl;
        return;
    }

    vector<long long>res(m+1);

    for(int i=2;i<m;++i)
        res[i]=(g[i+1]-2*g[i]+g[i-1])/2;

    long long tmp=(g[2]-g[1])+(g[m]-g[m-1]);

    long long sumv=0;
    for(int i=2;i<m;++i)
        sumv+=res[i]*(i-1);

    res[m]=(g[1]-sumv)/(m-1);
    res[1]=(tmp+2*res[m])/2;

    for(int i=1;i<=m;++i)
        cout<<res[i]<<(i==m?"":" ");
    cout<<endl;
}

int main(){
    ios_base::sync_with_stdio(false);
    cin.tie(NULL);
    int t;cin>>t;
    while(t--)run();
    return 0;
}
```

3 Spectral::Cup 2026 Round 1 Problem C

- Drastic difference in structure and variable names in 2 minutes

```cpp
int solve_for_median(int n,const vector<int>&a,int M){
    vector<int>b(n);
    bool ex=0;
    for(int i=0;i<n;i++){
        if(a[i]>M)b[i]=1;
        else if(a[i]<M)b[i]=-1;
        else{b[i]=0;ex=1;}
    }
    if(!ex)return 0;
    vector<int>dp(n+1,-1e9);
    dp[0]=0;
    for(int i=1;i<=n;i++){
        int bal=0;bool has=0;
        for(int j=i;j>=1;j--){
            bal+=b[j-1];
            if(a[j-1]==M)has=1;
            if((i-j+1)%2&&has&&bal==0)
                if(dp[j-1]!=-1e9)
                    dp[i]=max(dp[i],dp[j-1]+1);
        }
    }
    return dp[n]<0?0:dp[n];
}

void solve(){
    int n;cin>>n;
    vector<int>a(n),c;
    for(int i=0;i<n;i++){cin>>a[i];c.push_back(a[i]);}
    sort(c.begin(),c.end());
    c.erase(unique(c.begin(),c.end()),c.end());
    int ans=0;
    for(int M:c){
        vector<int>dp(n+1,-1e9);
        dp[0]=0;
        for(int i=1;i<=n;i++){
            int bal=0,z=0;
            for(int j=i;j>=1;j--){
                if(a[j-1]>M)bal++;
                else if(a[j-1]<M)bal--;
                else z++;
```

By **Pratyay19**, contest: Spectral::Cup 2026 Round 1 (Codeforces Round 1094, Di

```cpp
#include<bits/stdc++.h>
using namespace std;

int main(){
    ios::sync_with_stdio(0);
    cin.tie(0);
    int t;cin>>t;
    while(t--){
        int n;cin>>n;
        vector<int>a(n);
        for(int i=0;i<n;i++)cin>>a[i];
        vector<int>b=a;
        nth_element(b.begin(),b.begin()+n/2,b.end());
        int m=b[n/2];
        vector<int>pb(n+1),pc(n+1);
        for(int i=0;i<n;i++){
            pb[i+1]=pb[i]+(a[i]>=m?1:-1);
            pc[i+1]=pc[i]+(a[i]>m?1:-1);
        }
        vector<int>dp(n+1,-1);
        dp[0]=0;
        for(int i=1;i<=n;i++){
            for(int j=0;j<i;j++){
                if(dp[j]<0||(i-j)%2==0)continue;
                if(pb[i]-pb[j]<=0||pc[i]-pc[j]>=0)continue;
                dp[i]=max(dp[i],dp[j]+1);
            }
        }
        cout<<dp[n]<<"\n";
    }
}
```

4 Spectral::Cup 2026 Round 1 Problem A

- Descriptive variable names and a different structure in 2 minutes.

```cpp
int solve_for_median(int n,const vector<int>&a,int M){
    vector<int>b(n);
    bool ex=0;
    for(int i=0;i<n;i++){
        if(a[i]>M)b[i]=1;
        else if(a[i]<M)b[i]=-1;
        else{b[i]=0;ex=1;}
    }
    if(!ex)return 0;
    vector<int>dp(n+1,-1e9);
    dp[0]=0;
    for(int i=1;i<=n;i++){
        int bal=0;bool has=0;
        for(int j=i;j>=1;j--){
            bal+=b[j-1];
            if(a[j-1]==M)has=1;
            if((i-j+1)%2&&has&&bal==0)
                if(dp[j-1]!=-1e9)
                    dp[i]=max(dp[i],dp[j-1]+1);
        }
    }
    return dp[n]<0?0:dp[n];
}

void solve(){
    int n;cin>>n;
    vector<int>a(n),c;
    for(int i=0;i<n;i++){cin>>a[i];c.push_back(a[i]);}
    sort(c.begin(),c.end());
    c.erase(unique(c.begin(),c.end()),c.end());
    int ans=0;
    for(int M:c){
        vector<int>dp(n+1,-1e9);
        dp[0]=0;
        for(int i=1;i<=n;i++){
            int bal=0,z=0;
            for(int j=i;j>=1;j--){
                if(a[j-1]>M)bal++;
                else if(a[j-1]<M)bal--;
                else z++;
```

By **Pratyay19**, contest: Spectral::Cup 2026 Round 1 (Codeforces Round 1094, Di

```cpp
#include<bits/stdc++.h>
using namespace std;

int main(){
    ios::sync_with_stdio(0);
    cin.tie(0);
    int t;cin>>t;
    while(t--){
        int n;cin>>n;
        vector<int>a(n);
        for(int i=0;i<n;i++)cin>>a[i];
        vector<int>b=a;
        nth_element(b.begin(),b.begin()+n/2,b.end());
        int m=b[n/2];
        vector<int>pb(n+1),pc(n+1);
        for(int i=0;i<n;i++){
            pb[i+1]=pb[i]+(a[i]>=m?1:-1);
            pc[i+1]=pc[i]+(a[i]>m?1:-1);
        }
        vector<int>dp(n+1,-1);
        dp[0]=0;
        for(int i=1;i<=n;i++){
            for(int j=0;j<i;j++){
                if(dp[j]<0||(i-j)%2==0)continue;
                if(pb[i]-pb[j]<=0||pc[i]-pc[j]>=0)continue;
                dp[i]=max(dp[i],dp[j]+1);
            }
        }
        cout<<dp[n]<<"\n";
    }
}
```